

FIG. 1

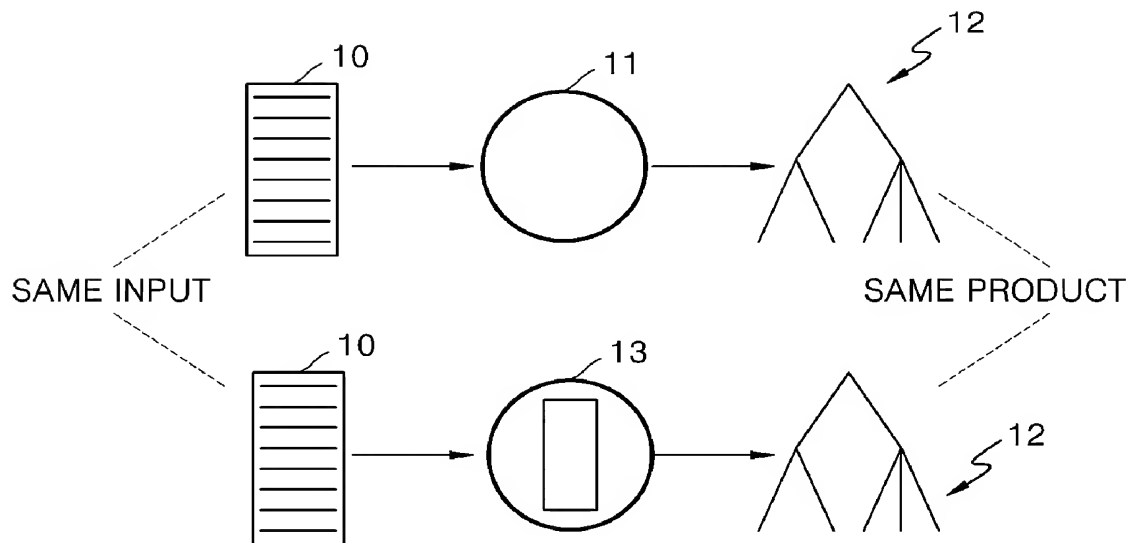


FIG. 2

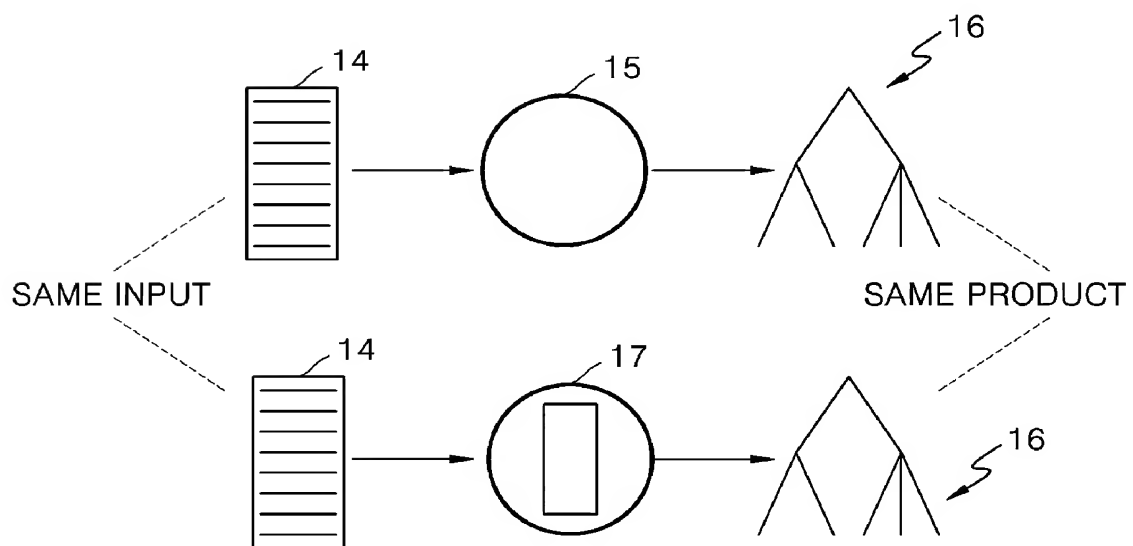


FIG. 3

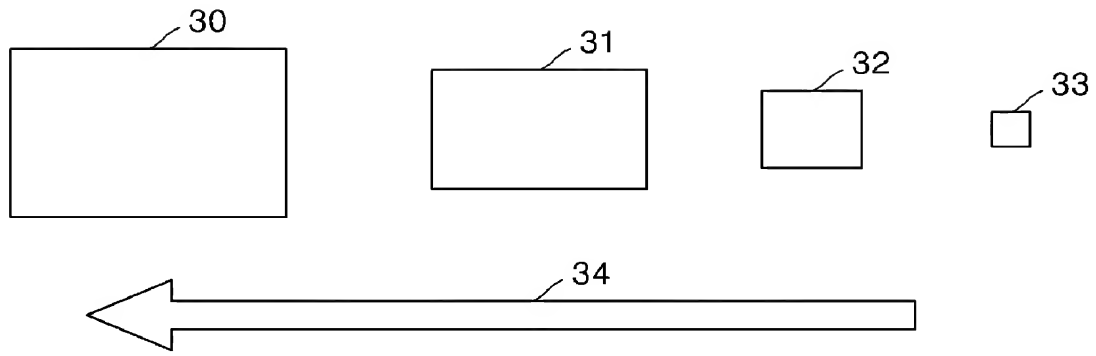


FIG. 4

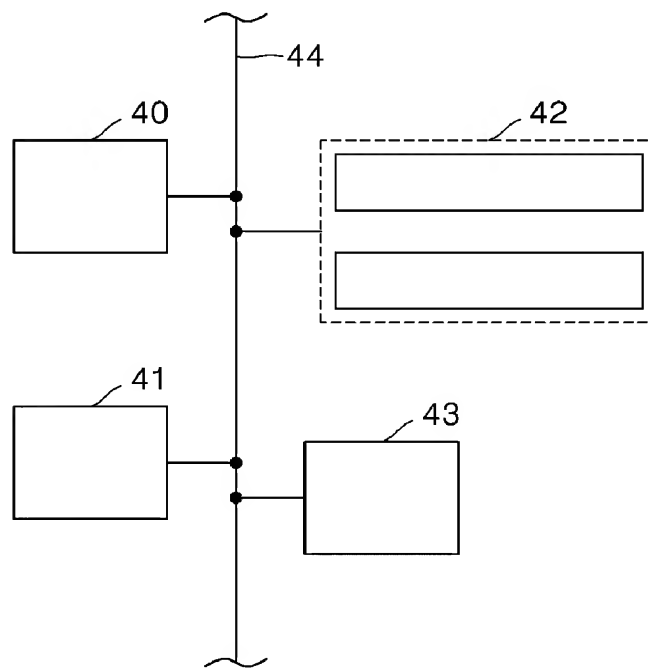


FIG. 5

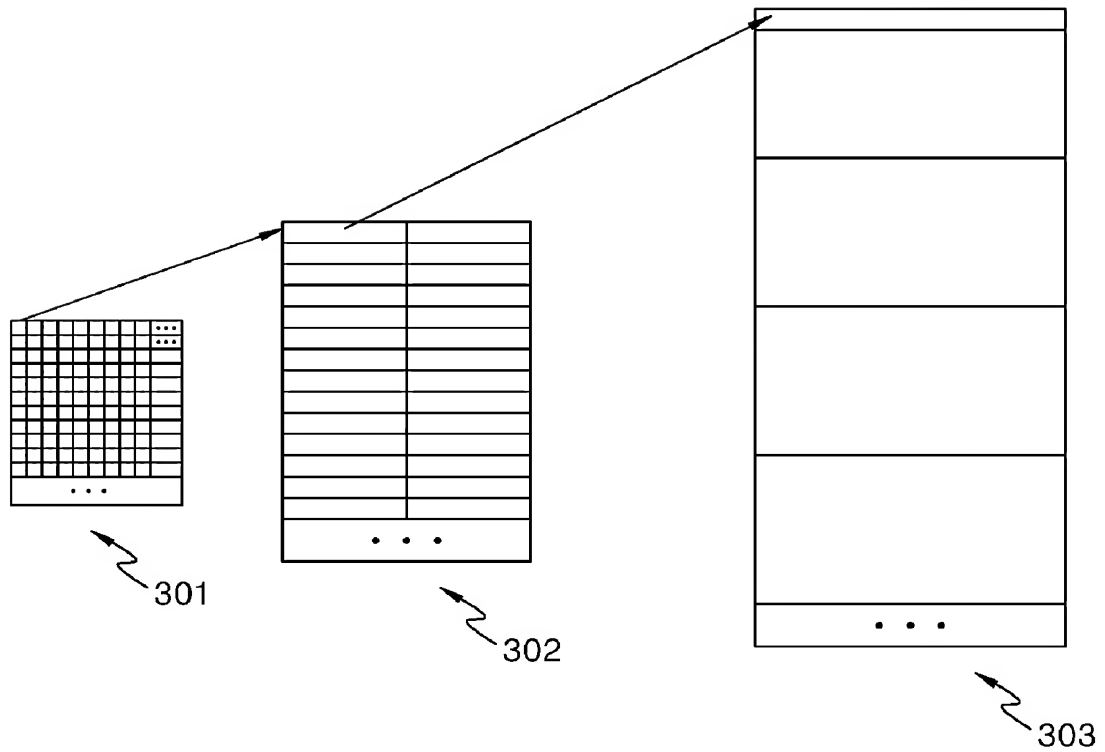


FIG. 6

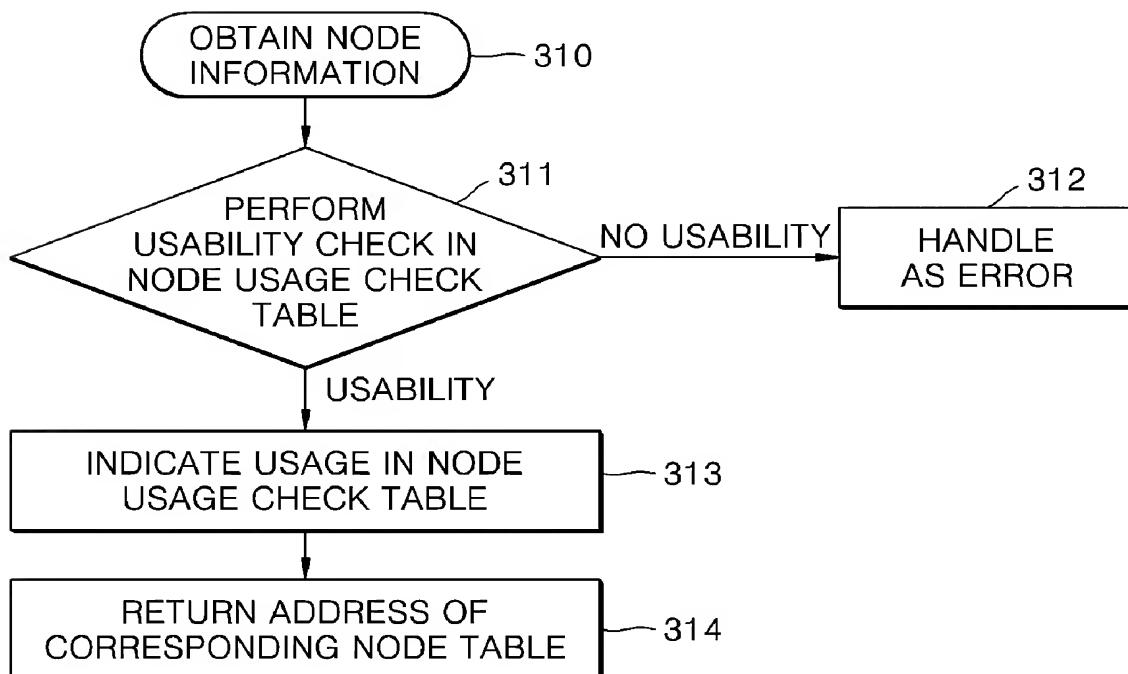


FIG. 7

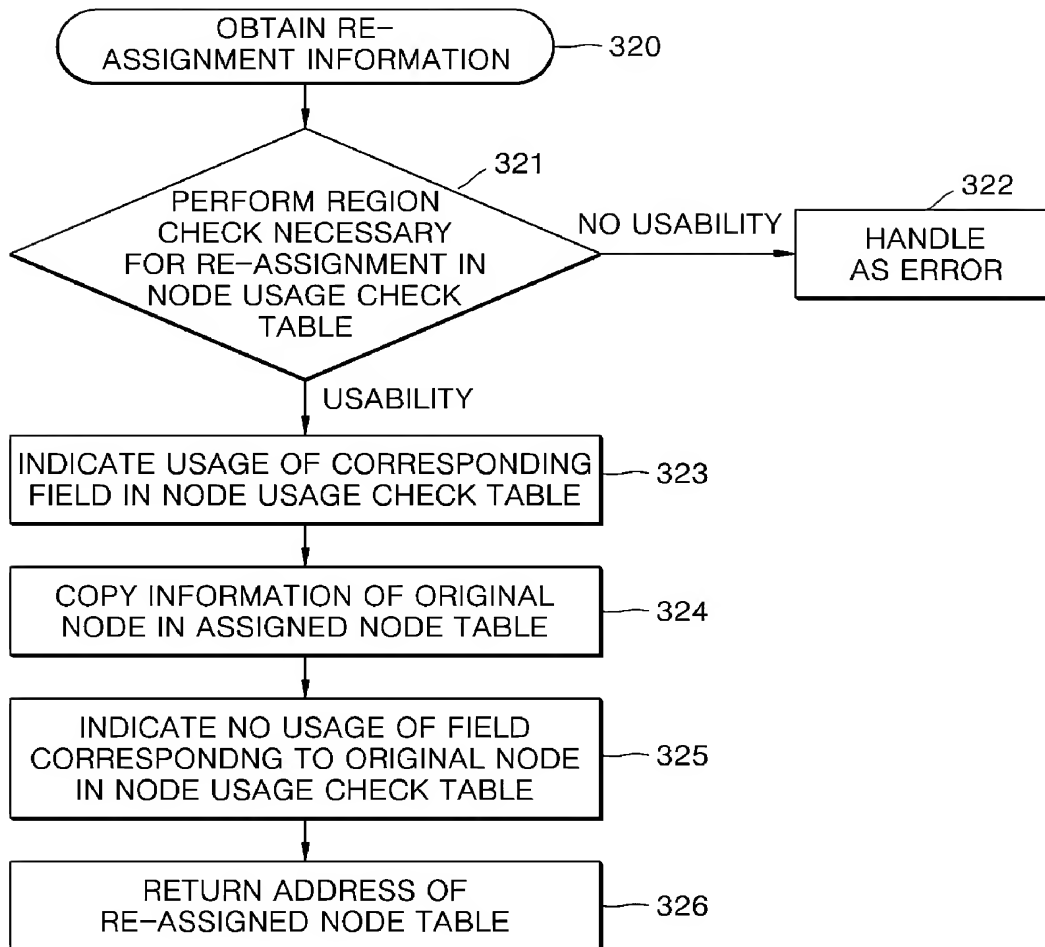


FIG. 8

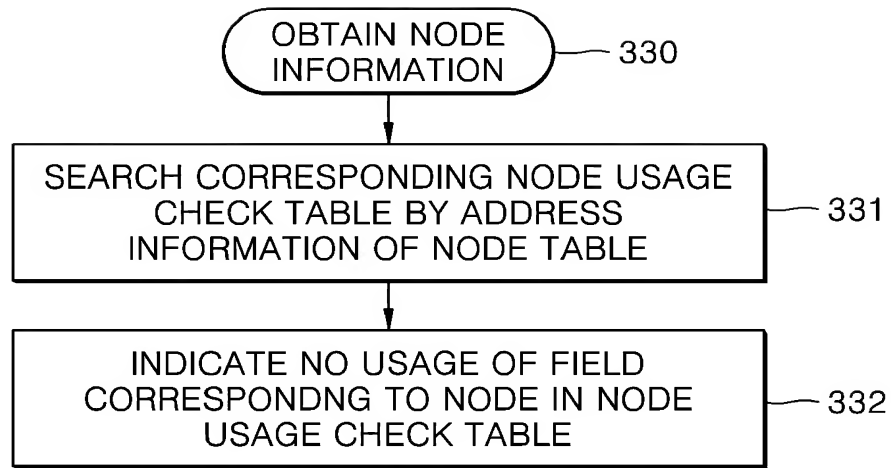


FIG. 9

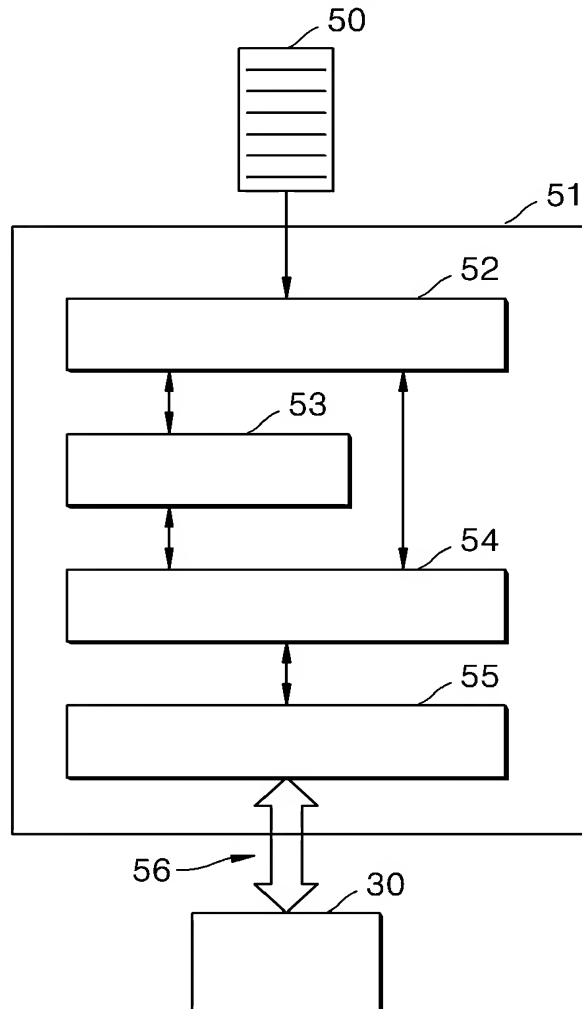


FIG. 10

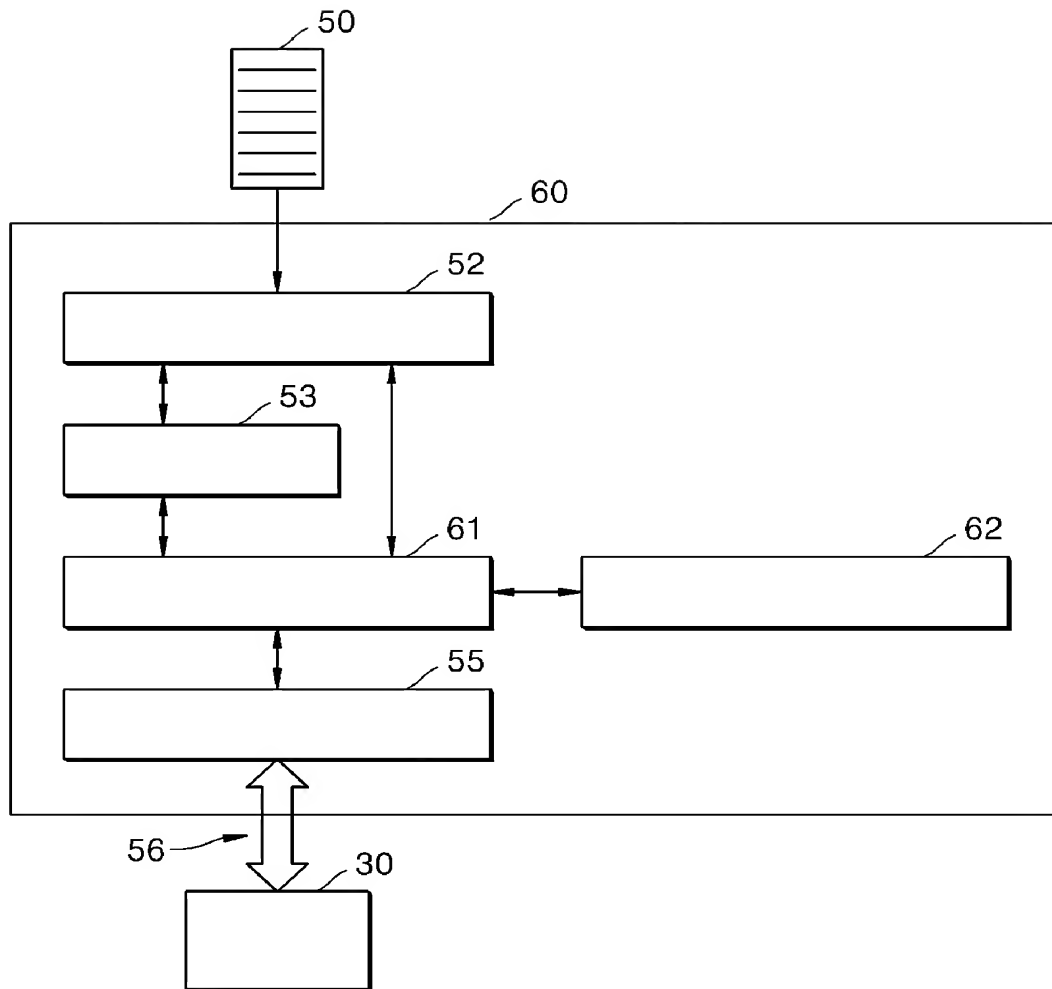
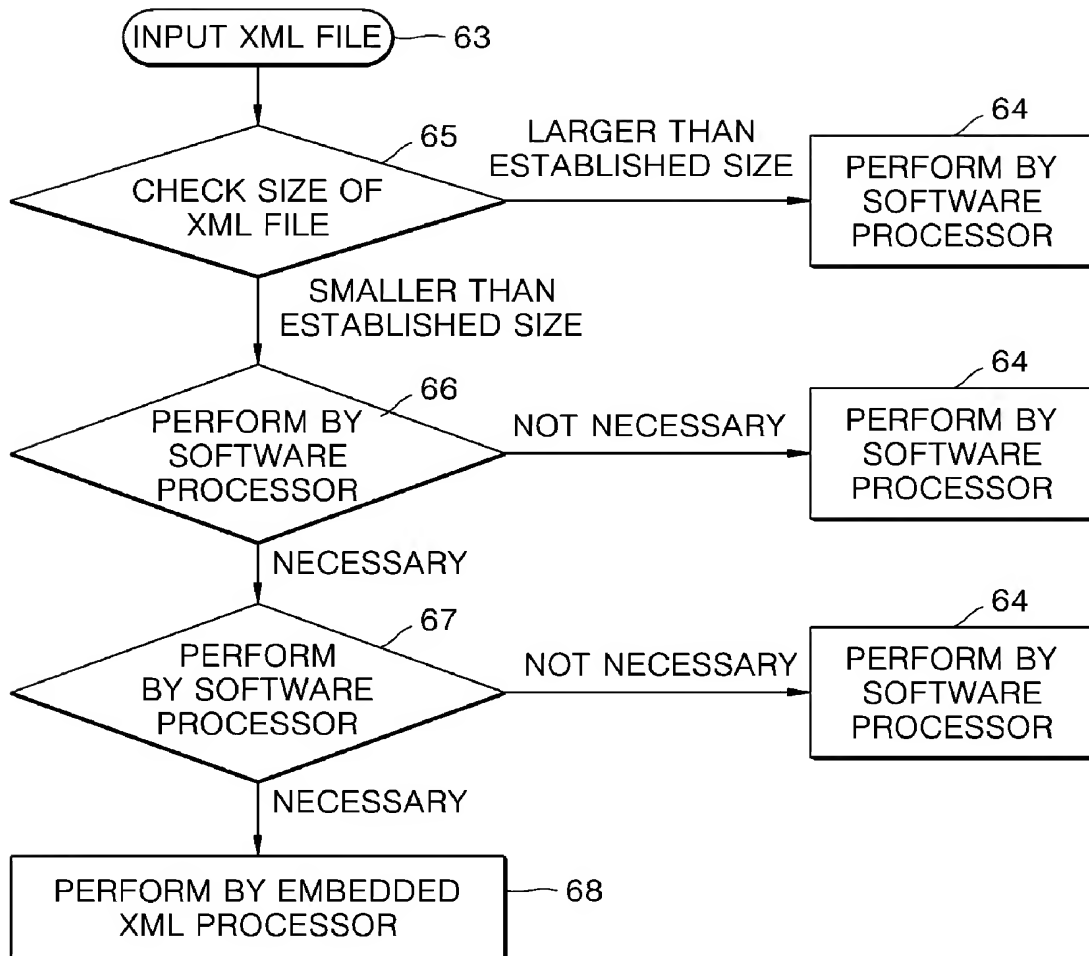


FIG. 11



**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 G06F 17/21**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean Patents and applications for inventions since 1975Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
FPD, PAJ, PATROM**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 02/091170 A1 (INTERNATIONAL BUSINESS MACHINES CORP.,) 14. NOV., 2002 * see abstracts & summary of the invention figure 1 - figure 4 Page 4 - page 9	1 - 9
A	KR 1999-31787 A(KOREA TELECOM.,) 6. MAY, 1999(family none) * see abstracts & claims	1 - 9

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&amp;" document member of the same patent family


Date of the actual completion of the international search

05 FEBRUARY 2005 (05.02.2005)

Date of mailing of the international search report

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**WO 2005/064489**  
**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

**PCT/KR2004/002759**  
International application No.  
**PCT/KR2004/002759**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 02/091170	14. nov., 2002	KR 2003-94320 US 2004-0205694	11.DEC.,2003 14.OCT.,2004